

Remarks

The specification has been amended to make the description more clear.

Claims 1-9 are in the case.

Claims 2-9 stand allowed.

Claim 1 is rejected under 35 U.S.C. 103(a) as being obvious over U.S. 5,891,702 (Reference A) on the basis that it discloses a one-step method of treating a biological sample with adenosine deaminase and at least one other enzyme selected from the group consisting of apyrase, alkaline phosphatase, acid phosphatase, hexokinase and ATPase, relying on column 6, lines 11-16.

Reconsideration is requested.

The rejection misstates what the reference discloses at column 6, lines 11-16 in that the reference mentions adenosine phosphate deaminase which is not the adenosine deaminase mentioned in the rejection or that is recited in Claim 1. Adenosine phosphate deaminase (U.S. 5,891,702) is registered as E.C.3.5.4.17 and is a different enzyme from adenosine deaminase (recited in Claim 1) which is registered as E.C.3.5.4.4. Adenosine phosphate deaminase is disclosed in the reference as acting a wide variety of substrates whereas adenosine deaminase (recited in Claim 1) is disclosed in the reference as specifically acting on adenosine. See the reference at column 5, lines 27-46.

Moreover, the object in the reference is to remove ATP and not to remove non-cyclic ATP, ADP and AMP as is the requirement in Claim 1. Thus the reference does not motivate removal of ADP and non-cyclic AMP as required in Claim 1.

Moreover, even if adenosine phosphate deaminase (the reference) would degrade ATP, ADP and AMP with or without apyrase and alkaline phosphatase without 5'-nucleotidase, this should not make it obvious that the Claim 1 enzyme combination would degrade ATP, ADP and AMP without 5'-nucleosidase as is required in Claim 1.

Note further that the reference teaches removal of non-cyclic AMP only by use of AMP deaminase (E.C.3.5.4.6) which is a third and different deaminase from what Claim 1 requires, whereas the Claim 1 combination removes non-cyclic AMP without requiring AMP deaminase.

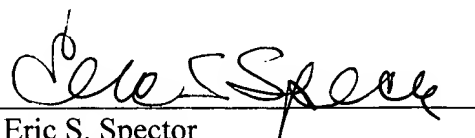
The adenosine phosphate deaminase of the reference degrades cAMP (see column 5, line 39) whereas Claim 1 allows preserving cAMP or adenylate cyclase activity for analysis.

It is submitted that the above justifies allowance of Claim 1 over the reference even without amendment of Claim 1.

Allowance is requested.

Respectfully submitted,

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